

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for manufacturing a fuel cell separator, comprising the steps of:

obtaining a mixture by mixing a thermoplastic resin and a conductive material, wherein the thermoplastic resin is a resin selected from the group consisting of: ethylene / vinyl acetate copolymers, ethylene / ethyl acrylate copolymers, straight-chain low-density polyethylene, polyphenylene sulfide and modified polyphenylene oxide, and wherein the conductive material includes carbon particles selected from the group consisting of black lead, Ketchen black and acetylene black;

forming with the mixture a separator starting material having gas flow passage grooves in a contact face thereof; and

irradiating the contact face of the separator starting material with an electron beam so as to harden the contact face to a degree that the thermoplastic resin of the contact face has a 3-dimensional bridge structure and the thermoplastic resin of a part other than the contact face of the separator starting material keeps an elasticity thereof.

2 – 8 (Canceled)

9. (Previously Presented) A method for manufacturing a fuel cell separator, comprising the steps of:

obtaining a mixture by mixing

a thermoplastic resin selected from the group consisting of:

polyphenylene sulfide and modified polyphenylene oxide, and

particles of a conductive material selected from the group consisting of black lead, Ketchen black and acetylene black;

forming with the mixture a separator starting material having gas flow passage grooves in a contact face thereof; and

irradiating the contact face of the separator starting material with an electron beam.

10. (Previously Presented) A method for manufacturing a fuel cell separator, comprising the steps of:

obtaining a mixture by mixing

a thermoplastic resin selected from the group consisting of: ethylene / vinyl acetate copolymers, ethylene / ethyl acrylate copolymers, straight-chain low-density polyethylene, polyphenylene sulfide and modified polyphenylene oxide, and

particles of a conductive material, wherein the conductive material is black lead;

forming with the mixture a separator starting material having gas flow passage grooves in a contact face thereof; and

irradiating the contact face of the separator starting material with an electron beam.

11. (Previously Presented) The method for manufacturing a fuel cell according to claim 9, wherein the conductive material is black lead.

12. (Cancelled)